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EXAMINER

GHEBRETINSAE, TEMESGHEN

ART UNIT

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Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/882,100
Filing Date: June 15, 2001
Appellant(s): CARLSON, ARTHUR J.

John A. Wiberg
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 8/30/10 appealing from the Office action mailed 12/02/09.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1-22 are rejected under 35 U.S.C. 103(a).

(4) Status of Amendments after Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

5,781,598 Hardy III 07-1998

Applicant specification page 2, lines 4-9.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over
Admitted prior art page 2, lines 4-9 in view of Hardy III. (5,781,598).

Consider claim 1,7,13. The admitted prior art discloses a method of restricting symbol size in an ADSL system comprising obtaining a data rate during initialization (inherent all communication data have data rate { **More particularly, ADSL modems transmit at a rate of 4000 symbols per second.** specification page 1, Para 4} and forming symbols using

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a multiple of a predetermined number of bits per symbol or forming symbols using any integer number (i.e. arbitrary) of bits per symbol (see page 2, lines 4-9.)

"As an alternative, it has been proposed in forthcoming revisions to the current standards that the total number of bits, L, per symbol be allowed to be any integer (i.e., arbitrary), rather than simply a multiple of 8. While this proposed alternative addresses the excess data carrying capacity problem mentioned above, it introduces its own associated problems."

The prior art differs from the claimed invention in that, the prior art does not explicitly disclose "forming symbols based on the data rate".

However, Hardy (5,781,598) discloses a method and apparatus for transmitting data from the first station to second station comprising the steps of: obtaining a data rate during initialization {**the system determines an originating data rate at the originating system** see abstract}; comparing the data rate to a threshold (**setting a threshold data rate** see abstract); forming (or transmitting) one set of symbols (**a character mode**) if the data rate is below the threshold; and forming (or transmitting) another set of symbols (**packet mode**) if the data rate is above the threshold.(see abstract and col.3, lines 40-57 col.4, lines 33-37 and claims 1 and 13).

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to make use of the teaching of Hardy (forming symbols based on the data rate) in the system of the prior art. The suggestion/motivation for doing so would have been to solve the excess data carrying capacity problem and cost (see admitted prior art page, 2, lines 4-9 see also col.4, lines 33-52 Hardy).

As per claim 7, 13, the admitted prior art in view of Hardy disclose the limitations of the claim as applied in claim 1. Further more, Hardy discloses a method and means for sending message to choose a symbol size (see col.12, lines 5-15 and fig.3).

As per claim 2-3,8-9,18-20, the data rate comprises an estimated maximum received data rate and method and means for comparing the maximum data rate to the threshold (see col.4, lines 33-40 and fig.3A).

As per claims 4-6,10-12,15-17, Admitted prior art in view of Hardy disclose the limitations of claim 1 as applied above. Further, the particularly claimed values of thresholds and numbers of bits per symbol are not claimed as being related to any particular advantage or feature of the invention. None of the claimed values are disclosed as providing any synergistic outcome. Rather, the use of any of the claimed values would lead only to routine and predictable results. Therefore the uses of the particularly claimed values (and any others) are considered to be a matter of design choice to be chosen by one having ordinary skill in the art depending upon a desired operation of the system.

As per claim 14,21-22, the admitted prior art discloses that the pre selected number of bits per symbol could be any integer {1-9 which include 2,4,8} (i.e., arbitrary) rather than simply a multiple of 8.(see col.2, lines 4-9).

(10) Response to Argument

Applicant argues on page 6, that the prior art does not disclose "obtaining a data rate during initialization". However, examiner disagrees with applicant conclusion

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because in communication art obtaining a data rate during initialization is well known. Any data communication is based on data rate. See for example Hardy abstract and col.3,, lines 40-49.

Applicant also argues Hardy does not disclose “forming symbols” based on the data rate. However, examiner disagrees with applicant because Hardy does teach “forming symbols” based on the data rate. Hardy does teach forming (or transmitting) one set of symbols (**a character mode**) if the data rate is below the threshold; and forming (or transmitting) another set of symbols (**packet mode**) if the data rate is above the threshold. “Character mode” is one set of “formed symbol” and “packet mode” is one set of “formed symbol” . See abstract and col.3, lines 40-57 col.4, lines 33-37 and claims 1 and 13).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Temesghen Ghebretinsae/

Primary Examiner, Art Unit 2611

12/2/10

Conferees:

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/Mohammad H Ghayour/

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